

HTIRC-03-008



January 22, 2004

To: Commissioner for Patents
P.O.Box 1450
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572
28 Davis Avenue
Poughkeepsie, N.Y. 12603

Subject: | Serial No. 10/706,838 11/12/03 |
Jei-Wei Chang et al.
NARROW TRACK CPP HEAD WITH BIAS
CANCELLATION
| _____ |

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation
In An Application.

The following Patents and/or Publications are submitted to
comply with the duty of disclosure under CFR 1.97-1.99 and
37 CFR 1.56.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being
deposited with the United States Postal Service as first class
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P.O. Box 1450, Alexandria, VA 22313-1450, on January 27, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

SBAR 1/27/04

U.S. Patent 6,002,553 to Stearns et al., "Giant Magneto-resistive Sensor," disclose a sensor formed of alternating magnetic and non-magnetic materials.

U.S. Patent 6,597,546 to Gill, "Tunnel Junction Sensor with an Antiferromagnetic (AFM) Coupled Flux Guide," describes a tunnel junction sensor with AFM coupled flux guide.

U.S. Patent 6,577,124 to Coehoorn et al., "Magnetic Field Sensor with Perpendicular Axis Sensitivity, Comprising a Giant Magnetoresistance Material or a Spin Tunnel Junction," discloses a sensor having FM layers with different uniaxial anisotropies.

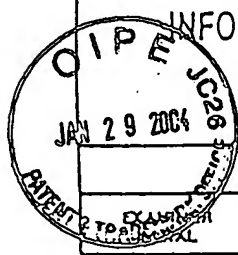
U.S. Patent 6,529,353 to Shimazawa, "Magnetoresistive Tunnel Junction Element with Bias Magnetic Field Applying Layer," discloses a hard magnet used to apply bias to a sensor.

U.S. Patent 5,739,987 to Yuan et al., "Magnetoresistive Read Transducers with Multiple Longitudinal Stabilization Layers," discloses AFM layers providing transverse biasing to a sensor.

Sincerely,



Stephen B. Ackerman,
Reg. No. 37761



INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

Document Number (Optional)

HTIRC-03-008

Application Number

10/706,838

Applicant

Jei-Wei Chang et al.

Filing Date

11/12/03

Group Art Unit

U. S. PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILED DATE IF APPROPRIATE
6002553	12/14/99	Stearns et al.	360	113	2/28/94
6597546	7/22/03	Gill	360	321	4/19/01
6577124	6/10/03	Coehoorn et al.	324	252	8/13/99
6529353	3/4/03	Shimazawa	360	324.2	11/16/01
5739987	4/14/98	Yuan et al.	360	113	6/4/96

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
					YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.